

ABSTRACT

5 A transducer apparatus is disclosed herein, including a method thereof for forming the transducer apparatus. A metal diaphragm can be molecularly bonded to a ceramic material to form a ceramic surface thereof. A bridge circuit is connected to the ceramic surface of the metal diaphragm. An input pressure port for pressure sensing thereof can then be provided,
10 wherein the input pressure port is connected to the metal diaphragm to thereby form a transducer apparatus comprising the metal diaphragm, the bridge circuit and the input pressure port. The metal diaphragm is preferably welded to the input pressure. The metal diaphragm and the ceramic surface thereof preferably operate over a temperature of range of at least 40° C to
15 150°C, as does the transducer apparatus. The transducer apparatus functions as a pressure transducer that can be used in corrosive media and high temperature applications